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3M

June 25, 2004

California Energy Commission
Dockets Office
Attn: Dockets 03-IEP-01
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

Re: 3M's Comments on the 2004 Integrated Energy Policy Report (IEPR) Update

Dear Commissioners Geesman and Boyd:

3M welcomes the opportunity to provide comments on alternatives to transmission system expansion as part of the Commission's "2004 Transmission Update" (Docket number 03-IEP-01).

As you may know, 3M in coordination with various federal, state, and private entities has developed an exciting new 3M Brand Composite Conductor known as Aluminum Conductor Composite Reinforced or "ACCR". The ACCR technology can provide increases in transmission capacity (ampacity) up to 1.5 to 3 times greater than conventional conductors for the same amount of sag. This enables transmission line upgrades within existing rights of way without significant tower modifications.

Some of the benefits of the ACCR technology include the following:

- Significant increases in ampacity, increasing capacity on existing towers;
- Decreased congestion;
- Reduced environmental impacts through reconductoring, as opposed to building a new line on a new right of way;
- No visual change to the line;
- Extended tower life;
- Reduced installation time; and
- Reduced construction costs.

With its enhanced properties, the 3M Composite Conductor can address demanding applications such as transmission bottlenecks, thermal upgrades, difficult clearance requirements, increased ice-load ratings, river crossings, and other environmentally sensitive issues. Line rebuilds can be avoided where clearance requirements change or additional capacity is needed. With only aluminum constituents, the conductor can be used in high-corrosion locations, such coastal installations. Where heavy ice loads exists in the mountains, a similar diameter conductor can be used to achieve higher ampacity ratings for the same ice-load ratings without structural modifications, thus avoiding the need for new construction in environmentally sensitive areas. In new construction, long-span crossings can be achieved with shorter towers.

We are attaching to this letter the following technical documents highlighting the development and demonstration of the effectiveness of the ACCR technology:

- Aluminum Conductor Composite Reinforced, Technical Notebook (795 kcmil family), Conductor and Accessory Testing.
- Aluminum Conductor Composite Reinforced, Technical Notebook (477 kcmil family), Conductor & Accessory Testing.
- Additional information may be found on the 3M ACCR website: http://www.3m.com/market/industrial/mmc/accr/

We appreciate this opportunity to comment on the IEPR update. If you have any questions regarding our comments, please contact Tracy L. Anderson, Program Manager at (651) 736-1842. Thank you.

Sincerely,

Patrick Ferguson
Business Development Manager
Metal Matrix Composites

Attachments